UPDATE

Diabetic Arteries Often Re-Close After Surgery

Diabetics are more likely to have their arteries clog up again after surgery to open them, which might explain why diabetics are at greater risk of death following the procedure, according to new research.

The findings suggest that, in diabetics, angioplasty should not be used without inserting a wire scaffold or stent to keep the vessel open. During angioplasty, a balloon is inflated inside the artery to flatten fatty build-up and open the vessel.

Angioplasty is a common alternative to bypass surgery, but diabetics are more likely to die following the procedure. To date "no clear explanation has been provided for this finding," write Dr. Eric Van Belle from the University of Lille, France, and colleagues.

The researchers followed more than 500 diabetics who had undergone balloon angioplasty. The investigators found that the amount of re-blocking (restenosis) in the diabetics' blood vessels 6 months after angioplasty was associated with increased chance of death, particularly in a subgroup of diabetics with complete restenosis, known as "occlusive" restenosis. The findings are published in the March 6th issue of Circulation: Journal of the American Heart Association.

"This is the first study to show that occlusive restenosis has a clinical relevance and is one of the strongest predictors of death after angioplasty in the diabetic population," Van Belle noted in a statement from the American Heart Association.

"This study indicates that diabetics should be treated differently from the general population, and may lead to new therapies to target re-blocking, or restenosis, in that group," Van Belle explained. His team suggests that use of a stent should be combined with powerful antiplatelet drugs for this high-risk group of patients.

It may not be surprising that people with type 2 diabetes suffer increased restenosis, according to Dr. Burton E. Sobel, from the University of Vermont College of Medicine in Burlington. In an editorial accompanying the report, Sobel notes that high levels of insulin in the blood can affect clotting, protein breakdown, and other systems that affect blood vessel walls.

SOURCE: Circulation 2001;103:1218-1224, 1185-1187

STATE HEALTH PLAN PREVENTION PARTNERS
South Carolina State Budget and Control Board
Office of Insurance Services-Insurance Benefits Management
July 2001